CONTENTS
Volume 23

Number 1, January 1985

DEDICATION OF PROCEEDINGS TO THE RECIPIENT OF THE PIONEER AWARD FOR 1985, L.E.A. ROWSON.....1

COMMERCIAL SPLITTING OF BOVINE EMBRYOS
R.D. Baker and B.F. Shea.....3

COMMERCIAL FREEZING OF BOVINE EMBRYOS IN GLASS AMPULES
W.H. Pettit, Jr.....13

COMMERCIAL FREEZING OF BOVINE EMBRYOS IN STRAWS
J.M. Wright.....17

USE AND HANDLING OF DRUGS AND BIOLOGICALS IN EMBRYO TRANSFER
T.S. Wollen, R.H. Schultz and H.L. Newkirk.....31

ESTIMATION OF EMBRYONIC LOSSES IN BOVINE EMBRYO TRANSFER RECIPIENTS FROM PROGESTERONE PROFILES AND RETURNS TO ESTRUS
K.L. Markette, G.E. Seidel, Jr. and R.P. Elsden.....45

FACTORS AFFECTING THE SURVIVAL OF TRANSFERRED WHOLE AND HALF-EMBRYOS IN CATTLE
Y. Heyman.....63

EMBRYONIC LOSS IN MARES: INCIDENCE, TIME OF OCCURRENCE, AND HORMONAL INVOLVEMENT
O.J. Ginther.....77

FACTORS AFFECTING THE SURVIVAL OF PIG EMBRYOS
W.F. Pope and N.L. First.....91

THE INFLUENCE OF VARIATION IN EMBRYO STAGE AND MATERNAL HORMONE PROFILES IN FARM ANIMALS
I. Wilmut, D.I. Sales and C.J. Ashworth.....107

THE USE OF EMBRYO TRANSFER AND STEROID HORMONE REPLACEMENT THERAPY IN THE STUDY OF PRENATAL MORTALITY
N.W. Moore.....121

MATERNAL RECOGNITION OF PREGNANCY IN RELATION TO THE SURVIVAL OF TRANSFERRED EMBRYOS: ENDOCRINE ASPECTS
W.W. Thatcher, J.J. Knickerbocker, F.F. Bartol, F.W. Bazer
R.M. Roberts and M. Drost.....129

MATERNAL RECOGNITION OF PREGNANCY IN THE EWE, COW AND SOW: VASCULAR AND IMMUNOLOGICAL ASPECTS
S.P. Ford.....145

THERIOGENOLOGY

INTRINSIC EMBRYONIC FACTORS THAT MAY AFFECT SURVIVAL AFTER TRANSFER
W.A. King.....161

THE EFFECT OF CLENBUTEROL ON PRODUCING PREGNANCIES FROM BOVINE EMBRYO TRANSFER
F. Barnes and N.L. First.....175

EFFECTS OF PROGESTERONE (P4) AND ESTROGEN (E2) ON FERTILIZATION FAILURE AND EARLY EMBRYONIC MORTALITY IN SUPEROVULATED COWS
D.R. Barrios, S. McConnell, M.J. Bowen and D.C. Kraemer...176

NON-SURGICAL EMBRYOS TRANSFER IN THE RHESUS MONKEY
B.D. Bavister, K. Collins and S. Eisele.....177

OVARIAN RESPONSE AND CORTISOL AND PROGESTERONE BLOOD LEVELS IN SUPEROVULATED HEIFERS TREATED WITH DEXAMETHASONE
A. Bielanski.....178

EFFECT OF SAMPLE CONTAINER AND CRYOPROTECTANT REMOVAL METHOD ON SURVIVAL OF DEEP FROZEN BOVINE EMBRYOS
A. Bielanski, U. Schneider, V. Pawlyshyn and R.J. Mapletoft.....179

SUPEROVULATORY RESPONSE IN COWS FOLLOWING IMMUNIZATION AGAINST TESTOSTERONE AND TREATMENT WITH BOVINE FOLLICULAR FLUID AND PMSG
M.P. Boland, C.D. Nancarrow, R.M. Hoskinson, J.D. Murray, R.J. Scaramuzzi, H.M. Radford, J.A. Avenell, and B.M. Bindon.....180

THE EFFECT OF CA++ LEVELS IN THE FREEZING MEDIA ON IN VITRO SURVIVAL OF BOVINE EMBRYOS
K.R. Bondioli and P.C. Mertes.....181

PRODUCTION OF CATTLE CHIMERAE THROUGH EMBRYO MICROSURGERY
G. Brem, H. Tenhumberg, B. Kruff and H. Krausslich.....182

PRODUCTION OF OVINE CHIMERAS
J.E. Butler, G.B. Anderson, R.H. BonDurant and R.L. Pashen.....183

DIFFERENT EFFECT OF LH ON FSH-INDUCED SUPEROVULATION IN TWO BREEDS OF CATTLE
D. Chupin, Y. Combarnous and R. Procureur.....184

COMPARISON OF TWO FSH TREATMENT SCHEDULES TO INDUCE SUPEROVULATION IN EWES
Y. Cognie, D. Chupin and J. Saumande.....185

DIFFERENT METHODS OF SUPEROVULATION USING HORSE ANTERIOR PITUITARY EXTRACT (HAP) IN GOATS DURING BREEDING SEASON
C.H. Del Campo, F. Salas, R. Gatica and M.R. Del Campo....186

IN VITRO MATURATION OF HORSE OOCYTES
M. Desjardins, W.A. King and D. Bousquet.....187

RECIPIENTS AS A SOURCE OF VARIATION IN CATTLE EMBRYO TRANSFER
L.E. Donaldson.....188

SUPEROVULATION IN CATTLE: DOSE RESPONSE TO FSH-W WITH AND WITHOUT LH CONTAMINATION
L.E. Donaldson and D.N. Ward.....189

BIRTH OF BONGO ANTELOPE (Tragelaphus Euryceros) TO ELAND ANTELOPE (Tragelaphus Oryx) AND CRYOPRESERVATION OF BONGO EMBRYOS
B.L. Dresser, C.E. Pope, L. Kramer, G. Kuehn, R.D. Dahlhaussen, E.J. Maruska, B. Reece and W.D. Thomas..190

BLASTOCYST DEVELOPMENT IN THE WATER BUFFALO (Bubalus Bubalis)
M. Drost and R.P. Elsden.....191

ESTRUS SYNCHRONIZATION, SUPEROVULATION AND EMBRYO TRANSFER IN THE CRETAN GOAT (Capra Aegagrus Cretica)
B. Durrant and J.E. Oosterhuis.....192

MATURATION OF BABOON OR COW OOCYTES TRANSPLANTED INTO A SURROGATE DOMINANT FOLLICLE IN VIVO
A.D. Fleming, R. Salgado and T.J. Kuehl.....193

THE EFFECTS OF CRYOPROTECTIVE AGENTS, DILUTION RATES, FREEZING RATES, AND FREEZING UNITS ON THE SURVIVAL OF BOVINE EMBRYOS
G.C. Franks, S.L. Coley, B. Betterbed and R.D. Page.....194

DETECTION OF ANTIBODIES IN SOME IN VITRO FERTILIZATION PATIENTS AGAINST SPERM AND TERATOCARCINOMA CELLS IN THE SERUM AND FOLLICULAR FLUID
F.P. Haseltine, D. Anderson, N. Laufer, B. Tarlatzis, M.L. Polan and A.H. DeCherney.....195

A SINGLE 50 MG INJECTION OF FOLLICLE STIMULATING HORMONE (FSH) FOR SUPEROVULATION OF EMBRYO DONOR CATTLE
K.G. Hill, C.W. McFarland, R.W. Rorie, S.D. Viker and R.A. Godke.....196

CHANGES IN THE CAPILLARY PERMEABILITY OF NORMAL RECIPIENT RABBIT UTERI AFTER TRANSFER OF BLASTOCYSTS FROM INDOMETHACIN-TREATED DONORS
M.A. Jones, Z.-d. Cao, W. Anderson and M.J.K. Harper.....197

BOVINE FERTILIZATION AFTER IN VITRO INSEMINATION WITH MOTILE SPERM FRACTIONS
C.L. Keefer, B.G. Brackett and C.G. Troop.....198

A METHOD FOR FREEZING EARLY MURINE EMBRYOS BY PLUNGING DIRECTLY INTO LIQUID NITROGEN
K.T. Krag, I.-M. Koehler and R.W. Wright, Jr. 199

THERIOGENOLOGY

TREHALOSE: A NON-PERMEABLE CRYOPROTECTANT FOR DIRECT FREEZING OF EARLY STAGE MURINE EMBRYOS
K.T. Krag, I.-M. Koehler and R.W. Wright, Jr. 200

FIELD TRIAL OF ONE-STEP DILUTED FROZEN-THAWED BOVINE EMBRYOS: AN UPDATE
S.P. Leibo.....201

REFRIGERATION OF BOVINE EMBRYOS
G.M. Lindner and D.E. Ellis.....202

SUPEROVULATION OF HEIFERS WITH FSH-P BEGINNING ON FOUR DIFFERENT DAYS OF THE CYCLE
C.E. Lindsell, V. Pawlyshyn, A. Bielanski and R.J. Mapletoft.....203

SURVIVAL OF EMBRYOS FROM STANDARD AND MINIATURE PIGS FOLLOWING RECIPROCAL EMBRYO TRANSFER
K.J. Lipetz, J.R. Diehl, L.D. Stuart and D.E. Wildt.....204

PROGRESS TOWARDS TRANSGENIC CATTLE
J.K. Lohse, J.M. Robl and N.L. First.....205

PROSTAGLANDIN F2 ALPHA (PGF) TREATMENTS FOR LUTEAL REGRESSION IN SUPEROVULATION REGIMENS OF DONOR CATTLE
C.R. Looney, K.R. Bondioli, R.T. Roach, A.J. Oden and J.M. Massey.....206

COMPARISON OF NORGESTOMET AND PROSTAGLANDIN F2 ALPHA (PGF) FOR ESTRUS SYNCHRONIZATION OF RECIPIENTS NURSING EMBRYO TRANSFER (ET) CALVES
A.B. McGrath, C.R. Looney, J.S. Bluntzer, A.J. Oden and J.M. Massey.....207

THE USE OF PRONASE TO SUCCESSFULLY REMOVE THE ZONA PELLUCIDA FROM BOVINE EMBRYOS
C.W. McFarland, R.W. Rorie, S.A. Voelkel and R.A. Godke...208

EFFECT OF SPLITTING TECHNIQUE ON PREGNANCY RATE FROM HALF EMBRYOS
P.C. Mertes and K.R. Bondioli.....209

THE CONTROL OF SUPEROVULATION IN THE BOVINE WITH A MONOCLONAL PMSG ANTIBODY
I. Moyaert, R. Bouters, O.T. Schonherr, A.T.M. Wilderbeek, A. Coert, M. Coryn and M. Vandeplassche.....210

EMBRYONIC CHROMOSOMAL ABNORMALITIES AND REPRODUCTIVE WASTAGE IN FECUNDIN TREATED AND CONTROL MERINO EWES
J.D. Murray, M.P. Boland, C. Moran, C.D. Nancarrow, R.J. Scaramuzzi, R. Sutton, R.M. Hoskinson and I.G. Hazelton.....211

EFFECT OF ESTRUS DETECTION AND CORPUS LUTEUM DEVELOPMENT ON PREGNANCY RATES IN BOVINE EMBRYO RECIPIENTS
L.D. Nelson and C.F. Nelson.....212

SENSITIVITY OF PIG MORULAE TO DMSO/PVP OR GLYCEROL TREATMENT AND COOLING TO 10 C
H. Niemann.....213

RELATIONSHIP OF SERUM PROGESTERONE, LUTEINIZING HORMONE AND THE INCIDENCE OF PREGNANCY IN BOVINE EMBRYO TRANSFER RECIPIENTS
D.L. Northey, F.L. Barnes, W.H. Eyestone and N.L. First...214

SUSPENSION OF MOUSE EMBRYO DEVELOPMENT BY THE CARBONIC ANHYDRASE INHIBITOR SULFANILAMIDE
J.V. O'Fallon and R.W. Wright, Jr. 215

IN VITRO FERTILIZATION OF BOVINE OOCYTES USING HEPARIN TREATED AND SWIMUP SEPARATED FROZEN THAWED BOVINE SEMEN IS REPEATABLE AND RESULTS IN HIGH FREQUENCIES OF FERTILIZATION
J.J. Parrish, J.L. Susko-Parrish and N.L. First.....216

LUTEOTROPHIC FACTOR SECRETED BY BOVINE EMBRYONIC TISSUE
C. Plante, D. Bousquet, P. Guay, A.K. Goff and W.A. King..217

AN ACTIVATING DOSE OF ETHANOL IS DETRIMENTAL TO FERTILIZATION AND DEVELOPMENT OF MOUSE OVA
K.O. Pomeroy and G.E. Seidel, Jr. 218

CRYOPRESERVATION OF ISOLATED MURINE BLASTOMERES
R.S. Prather and N.L. First.....219

VITRIFICATION: A NEW APPROACH TO EMBRYO CRYOPRESERVATION
W.F. Rall and G.M. Fahy.....220

IMPLANTATION OF DOUBLE FROZEN HAMSTER EMBRYOS FOLLOWING EMBRYO TRANSFER
M.T. Ridha, F. Bigin and W.R. Dukelow.....221

TRANSFER OF NUCLEI FROM EIGHT-CELL TO TWO-CELL MURINE EMBRYOS
J.M. Robl and N.L. First.....222

THE USE OF STEER SERUM IN EMBRYO TRANSFER
J.L. Rodrigues, R.M. Gregory, J.S. Stefani and D.E. Saul..223

A NEW METHOD OF SPLITTING EMBRYOS WITHOUT THE USE OF A COMMERCIAL MICROMANIPULATOR UNIT
R.W. Rorie, C.W. McFarland, T.L. Overskei, S.A. Voelkel and R.A. Godke.....224

MICROMANIPULATION OF DAY-6 PORCINE EMBRYOS TO PRODUCE SPLIT-EMBRYO PIGLETS
R.W. Rorie, S.A. Voelkel, C.W. McFarland, L.L. Southern and R.A. Godke.....225

THERIOGENOLOGY

THE EFFECTS OF ESTROUS COW SERUM ON THE MATURATION AND FERTILIZATION OF THE BOVINE FOLLICULAR OOCYTE IN VITRO
A. Sanbuissho and W.R. Threlfall.....226

HUMAN MENOPAUSAL GONADOTROPIN (hMG) FOR SUPEROVULATION OF SHEEP
M.C. Schiewe, J.G. Howard, L.S. Stuart, K.L. Goodrowe and D.E. Wildt.....227

ARTIFICIAL INSEMINATION (AI) OF SUPEROVULATED BEEF CATTLE WITH A SINGLE INSEMINATION OF FROZEN SEMEN
M.C. Schiewe, S.A. Voelkel and R.A. Godke.....228

VARIABLES INFLUENCING POST-THAW EMBRYO SURVIVAL RATES IN MICE
P.M. Schmidt, M.C. Schiewe and D.E. Wildt.....229

IN VIVO AND IN VITRO DEVELOPMENT OF IN VITRO FERTILIZED BOVINE FOLLICULAR OOCYTES OBTAINED BY LAPAROSCOPY
M.A. Sirard, R.D. Lambert, P. Guay, D.P. Ménard and M. Bedoya.....230

STAGES OF THE FIRST MEIOTIC DIVISION OBSERVED IN BOVINE OOCYTES MATURED IN VITRO
U. Süss and K. Wüthrich.....231

SURVIVAL OF CRYOPRESERVED BOVINE EMBRYOS COOLED AT 0.5 OR 1 C/ MINUTE
T. Takeda, R.P. Elsden and G.E. Seidel, Jr. 232

REAL-TIME ULTRASOUND EVALUATION OF FOLLICULAR DEVELOPMENT IN SUPEROVULATED COWS
K.M. Thayer, D.W. Forrest and T.H. Welsh, Jr. 233

IN VITRO SURVIVAL OF EARLY-STAGE RABBIT AND COW EMBRYOS DIRECTLY FROZEN TO INTERMEDIATE TEMPERATURE (-25 TO -30 C) BEFORE PLUNGING IN LIQUID NITROGEN
C. Vincent, Y. Heyman, V. Garnier, Z. Smorag and J.P. Renard.....234

QUICK-FREEZING OF DAY FOUR MOUSE EMBRYOS
T.J. Williams and S.E. Johnson.....235

NONSURGICAL RECOVERY OF DEGENERATIVE OVA FROM THE UTERUS OF MARES
J.M. Wilson, J.L Kreider and G.D. Potter.....236

THE ONSET AND DURATION OF OVULATION IN SUPEROVULATED BEEF HEIFERS
M.C. Yadav, K.E. Leslie and J.S. Walton.....237

A STUDY OF METHODS FOR BISECTING RABBIT EMBRYOS
X. Yang, M. Battista and R.H. Foote.....238

ASYNCHRONOUS EMBRYO TRANSFER TO DAY-FOUR RECIPIENT RABBITS
X. Yang, M. Battista, W. Pope, M. Simkin, H.-J. Voss and R.H. Foote.....239

Number 2, February 1985

SERUM ESTRADIOL-17 BETA CONCENTRATIONS DURING SPONTANEOUS SILENT ESTRUS AND AFTER PROSTAGLANDIN TREATMENT IN THE MARE
E.M. Nelson, B.L. Kiefer, J.F. Roser and J.W. Evans.....241

OVARIAN ACTIVITY OF YANKASA SHEEP USING ABATTOIR SPECIMENS
J.O. Hambolu, S.A. Ojo, M.N. Jamdar and E.C.I. Molokwu....263

OVARIAN ACTIVITY OF SOKOTO RED GOATS USING ABATTOIR SPECIMENS
J.O. Hambolu and S.A. Ojo.....273

EFFECT OF DOPAMINE AGONISTS OR ANTAGONISTS, TRH, STRESS AND PIGLET REMOVAL ON PLASMA PROLACTIN CONCENTRATIONS IN LACTATING GILTS
B.B. Smith and W.C. Wagner.....283

FOLLICULAR DYNAMICS IN MARES TREATED WITH AN EQUINE PITUITARY EXTRACT
G.L. Woods and O.J. Ginther.....297

AN OPIOID ANTAGONIST STIMULATES MYOMETRIAL ACTIVITY IN EARLY POSTPARTUM COWS
H. Ehrenreich, M. Rüsse, D. Schams, J. Hammerl and A. Herz.....309

INDUCTION OF PARTURITION IN WATER BUFFALOES (Bubalus Bubalis)
B.S. Prakash and M.L. Madan.....325

OBSERVATIONS ON THE IN VITRO FORMATION, DEVELOPMENT AND DIFFERENTIATION OF TRILAMINAR VESICLES FORMED FROM ENZYMATICALLY DISPERSED PORCINE BLASTOCYSTS
R.L. Allen and R.W. Wright, Jr. 333

ASSIGNMENT OF FOAL PATERNITY WHEN A MARE IS BRED TO TWO STALLIONS
A.T. Bowling.....347

ABSENCE OF SEXUAL DIMORPHISM IN THE GOAT: INDUCTION OF LUTEINIZING HORMONE DISCHARGE IN THE CASTRATED MALE AND FEMALE AND IN THE INTERSEX WITH ESTRADIOL BENZOATE
G.D. Dial, B.S. Wiseman, R.S. Ott, A.L. Smith and and J.E. Hixon.....351

INTRA-UTERINE SURVIVAL AND GROWTH OF WISTAR AND WISTAR x BROWN NORWAY RAT EMBRYOS
J. Nagai, S. Watanabe, J. Kobayashi and S. Sugawara.....361

FREEZING OF BOVINE EMBRYOS: EFFECTS OF ONE-STEP ADDITION OF 1.4 M GLYCEROL
H. Niemann.....369

EFFECT OF PHENYLBUTAZONE (PBZ) ON LUTEOLYSIS IN THE MARE INDUCED BY UTERINE BIOPSY
M. Ellsworth-Swihart, L.F. Archbald, R.H. Ingraham and R.A. Godke.....381

LUTEAL FUNCTION IN COWS FOLLOWING DESTRUCTION OF OVARIAN FOLLICLES AT MIDCYCLE
R.L. Fogwell, J.L. Cowley, J.A. Wortman, N.K. Ames and J.J. Ireland.....389

INCLUSION OF BOVINE SERUM ALBUMIN IN SEMEN EXTENDERS TO ENHANCE MAINTENANCE OF STALLION SPERM VIABILITY
J.L. Kreider, W.C. Tindall and G.D. Potter.....399

PRELIMINARY REPORT ON THE EFFECT OF PROSTAGLANDIN F2 ALPHA ON THE DURATION OF THE OESTRUS INTERVAL IN BEAGLE BITCHES
E.E. Oettlé, E. Botha and I. Painter.....409

Number 3, March 1985

EFFECT OF DEXAMETHASONE AND HYDROCORTISONE ON THE COURSE OF SUPEROVULATION IN CATTLE
Z. Ewy, E. Wierzchoś, A. Bielański and B. Gajda.....415

FERTILITY TRIAL IN ZEBU CATTLE AFTER A NATURAL OR CONTROLLED ESTRUS WITH PROSTAGLANDIN F2 ALPHA, COMPARING NATURAL MATING WITH ARTIFICIAL INSEMINATION
C. Landivar, C.S. Galina, A. Duchateau and R. Navarro-Fierro.....421

PREFREEZING AND POST-THAW SEMEN CHARACTERISTICS OF FIVE RAM BREEDS COLLECTED BY ELECTROEJACULATION
R.C. Cochran, J.K. Judy, C.F. Parker and D.M. Hallford....431

LH AND FSH PROFILES AT SUPEROVULATION AND EMBRYO PRODUCTION IN THE COW
L.E. Donaldson.....441

EFFECTS OF REDUCED SUCKLING ON DAYS TO ESTRUS, CONCEPTION DURING LACTATION AND EMBRYO SURVIVAL IN SOWS
D.L. Grinwich and R.M. McKay.....449

THE EFFECTS OF BOVINE SERUM ALBUMIN, BOVINE UTERINE FLUID, AND HEAT-TRATED BOVINE SERUM ON IN VITRO MOUSE EMBRYO DEVELOPMENT
A.R. Menino, Jr., H.K. Cheek and J.L. O'Claray.....461

EFFECT OF THE OVULATORY CYCLE ON OVIDUCTAL SPERM STORAGE IN THE DOMESTIC FOWL
A.F. Bushman, H.P. Van Krey, D.M. Denbow and P.G. Siegel..473

VARIATION IN THE OXYTOCIN CONTENT OF CAPRINE CORPORA LUTEA ACROSS THE BREEDING SEASON
L.C. Freeman and W.B. Currie.....481

CHARACTERISTICS OF EMBRYOS FROM REPEAT BREEDER AND VIRGIN HEIFERS
H. Gustafsson.....487

CHEMICAL VASECTOMY OF DOMESTIC DOGS IN THE GALAPAGOS ISLANDS
B.D. Barnett.....499

CLOPROSTENOL INDUCED LUTEAL REGRESSION IN THE BEEF COW
I. OVARIAN RESPONSE AND ENDOCRINE CHANGES
L.M. Harrison, R.D. Randel, D.W. Forrest, J.G. Betts, W.D. Humphrey and D.R. Hardin.....511

CLOPROSTENOL INDUCED LUTEAL REGRESSION IN THE BEEF COW
II. HISTOLOGICAL EVALUATION OF CORPORA LUTEA AND CORRELATION WITH LUTEAL PROGESTERONE
J.G. Betts, D.W. Forrest, W.D. Humphrey, R.D. Randel, L.M. Harrison and S.L. Lovering.....523

MATING BEHAVIOR, SERUM TESTOSTERONE AND SEMEN CHARACTERISTICS IN VASECTOMIZED AND SHORT SCROTUM RAMS
L.A. Tierney and D.M. Hallford.....535

DEVELOPMENT OF ONE-CELL OVINE EMBRYOS IN TWO CULTURE MEDIA UNDER TWO GAS ATMOSPHERES
B. Betterbed and R.W. Wright, Jr. 547

EFFECTS OF ACCELERATED GROWTH DURING REARING ON REPRODUCTION AND LACTATION IN EWES LAMBING AT 13 TO 15 MONTHS OF AGE
S.H. Umberger, L. Goode, E.V. Caruolo, R.W. Harvey, J.H. Britt and A.C. Linnerud.....555

Number 4, April 1985

EFFECTS OF ZERANOL UPON BOVINE TESTICULAR FUNCTION
P.E Juniewicz, T.H. Welsh, Jr. and B.H. Johnson.....565

EFFECT OF DIFFERENT HUSBANDRY SYSTEMS ON THE REPRODUCTIVE DEVELOPMENT OF POST-WEANING RAM LAMBS UNDER TROPICAL CONDITIONS
J. Kumi-Diaka, T.K. Djang-Fordjour, V.O. Sekoni and D. Ogwu.....583

SUCCESSFUL TRANSFER OF EMBRYOS RECOVERED FROM A COW WITH CHRONIC CERVICITIS OF MIXED AEROBIC AND ANAEROBIC BACTERIAL AETIOLOGY: A CASE REPORT
R.O. Gilbert, R.I. Coubrough, B.J. Venter and M.A. Witcomb.....593

EFFECTS OF INTRAUTERINE INFUSION OF ESCHERICHIA COLI ENDOTOXIN IN ANESTROUS AND STEROID TREATED PONY MARES
T.A. Mollett, R.G. Elmore, T.L. Blanchard and J.N. Berg.....597

SEXUAL BEHAVIOR AND SERUM CONCENTRATIONS OF REPRODUCTIVE HORMONES IN NORMAL STALLIONS
C.H.G. Irvine, S.L. Alexander and J.P. Hughes.....607

PROGESTERONE SYNTHESIS AND HISTOLOGY OF POSTPARTUM BOVINE CORPORA LUTEA
R.T. Duby, T. Browning, D. Carey and D.L. Black.....619

PREGNANCY RATES RELATIVE TO RECIPIENT PLASMA PROGESTERONE LEVELS ON THE DAY OF NONSURGICAL TRANSFER OF FROZEN/THAWED BOVINE EMBRYOS
H. Niemann, B. Sacher and F. Elsaesser.....631

CYTOGENETIC STUDIES OF 1-29 TRANSLOCATION CARRYING COWS AND THEIR EMBRYOS
A.R. Dain, H.M. Dott, R. Newcomb and A.E. Schwabe.....641

RESPONSE AND FERTILITY OF DAIRY HEIFERS FOLLOWING INJECTION WITH PROSTAGLANDIN F2ALPHA DURING EARLY, MIDDLE OR LATE DIESTRUS
T.L. Watts and J.W. Fuquay.....655

EFFECTS OF COPULATION ON TIMING OF THE LH SURGE FOLLOWING SYNCHRONIZATION OF ESTRUS IN THE BOVINE
D.D. Zalesky, M.L. Day, K. Imakawa, R.J. Kittok and J.E. Kinder.....663

SCROTAL DIMENSIONS AND EJACULATE CHARACTERISTICS OF THREE BREEDS OF SHEEP IN TROPICAL NIGERIA
J. Kumi-Diaka, A.A. Adesiyun, V. Sekoni and C.D. Ezeokoli.....671

PREVALENCE OF ANTIBODIES TO SPECIFIC INFECTIOUS AGENTS IN BOVINE FETUSES FROM A SLAUGHTERHOUSE IN MINNESOTA
P. Virakul, F. Vahdat, H.S. Joo and R. Zemjanis.....679

COMPARATIVE FERTILITY OF NORMAL AND REPEAT-BREEDING COWS AS EMBRYO RECIPIENTS
T.Y. Tanabe, H.W. Hawk and J.F. Hasler.....687

CHEMICALLY DEFINED AND SERUM SUPPLEMENTED MEDIA EFFECTS ON MOUSE EMBRYO DEVELOPMENT
R.D. Bates, J.A. Kontio and W.R. Dukelow.....697

THE EFFECTS OF SUPEROVULATION ON BRUCELLA ABORTUS INFECTION IN THE BOVINE UTERUS
D.A. Stringfellow, B.W. Gray, P.H. Sparling, V.S. Panangala P.A. Galik and R.R. Young-White.....701

Number 5, May 1985

TWINNING IN THOROUGHBRED MARES IN POLAND
S. Deskur.....711

CHANGES IN MILK AND PLASMA CONCENTRATIONS OF PROGESTERONE IN COWS AFTER TREATMENT TO INDUCE SUPEROVULATION AND THEIR RELATIONSHIPS WITH NUMBER OF OVULATIONS AND OF EMBRYOS COLLECTED
J. Saumande, D. Tamboura and D. Chupin..... 719

FACTORS INFLUENCING ESTRUS AND CONCEPTION IN DAIRY HEIFERS AFTER PROSTAGLANDIN F2 ALPHA
R.L. Graves, R.G. Lutz, J.W. Riesen, T.A. Hoagland and C.O. Woody.....733

THE EFFECTS OF DIETARY MONENSIN SODIUM UPON SUPEROVULATION AND EMBRYO VIABILITY FROM MATURE COWS
A.M. Ortuno and R.L. Carson.....743

FERTILIZATION POTENTIAL OF FOLLICULAR OOCYTES CLASSIFIED BY STAGE OF CYCLE AND SIZE OF FOLLICLE
M.L. Leibfried-Rutledge, E.S. Critser and N.L. First.....753

EFFECT OF REPEATED FLUSHING AND A PROSTAGLANDIN ANALOGUE ON THE ESTROUS CYCLE OF PONY MARES
L.D. Brockschmidt, W.E. Loch and J.D. Sikes.....761

EFFECTS OF 72-HR CALF REMOVAL AND/OR GONADOTROPIN RELEASING HORMONE ON LUTEINIZING HORMONE RELEASE AND OVARIAN ACTIVITY IN POSTPARTUM BEEF COWS
R.T. Dunn, Jr., M.F. Smith, H.A. Garverick and C.W. Foley.....767

THE EFFECTS OF SHORT TERM CALF REMOVAL ON PULSATILE LH SECRETION IN THE POSTPARTUM BEEF COW
S. Edwards.....777

EFFECT OF THE BOVINE VIRAL DIARRHEA (BVD) VIRUS ON THE ENDOMETRIUM OF THE RABBIT
L.F. Archbald and C.L. Chen.....787

ULTRASONIC EVALUATION OF THE CORPUS LUTEUM OF THE MARE
R.A. Pierson and O.J. Ginther.....795

DURATION OF RETAINED FETAL MEMBRANES AND SUBSEQUENT FERTILITY IN DAIRY COWS
N.E. Halpern, H.N. Erb and R.D. Smith.....807

GENITAL TRACT PRESSURES IN MARES I. NORMAL PRESSURES AND THE EFFECT OF PHYSIOLOGICAL EVENTS
P.J. Goddard, W.E. Allen and E.L. Gerring.....815

AMIKACIN SULFATE IN THE CAT: SERUM, URINE AND UTERINE TISSUE CONCENTRATIONS
V.M. Shille, M.P. Brown, R. Gronwall and H. Hock.....829

Number 6, June 1985

DAILY SPERM PRODUCTION OF ZEBUS (Bos Indicus) ESTIMATED BY QUANTITATIVE HISTOLOGY OF THE TESTIS
F.M. Cardoso and H.P. Godinho.....841

MAINTENANCE OF MULTIPLE CORPORA LUTEA IN SUPEROVULATED-PREPUBERTAL HEIFERS FOLLOWING HYSTERECTOMY
D.L. Hamernik and J.J. Reeves.....849

STUDIES ON MATURATION OF GENITALIA IN MURRAH BUFFALO-HEIFERS
G. Singh and G.B. Singh.....857

EFFICACY OF TEPA AS A "SPERM LABEL" FOR COMPETITIVE FERTILIZATION STUDIES IN THE RABBIT
R.J. Wall, C.A. Carberry and R.H. Foote.....863

SPERM SEPARATION ATTEMPTS VIA THE USE OF ALBUMIN GRADIENTS IN RABBITS
P.M. Zavos.....875

MANIFESTATION OF A PROBABLE LETHAL GENE IN HOLSTEIN-FRIESIAN COWS
L.E.L. Pinheiro and A.M.L. Andrade.....881

THE RELATIONSHIP BETWEEN BREEDING SOUNDNESS EVALUATION AND FERTILITY OF BEEF BULLS UNDER GROUP MATING AT PASTURE
M. Makarechian and A. Farid.....887

A SPECIFIC OLIGOTERATOZOOSPERMIA IN A BULL: THE SPERM TAIL STUMP DEFECT
J. Arriola, L.A. Johnson, M. Kaproth and R.H. Foote.....899

SOME OBSERVATIONS ON EARLY EMBRYONIC DEATH IN MARES
M.D. Villahoz, E.L. Squires, J.L. Voss and R.K. Shideler.....915

COOLING RATES, STORAGE TEMPERATURES AND FERTILITY OF EXTENDED EQUINE SPERMATOZOA
C.A. Province, E.L. Squires, B.W. Pickett and R.P. Amann.....925

A COMPARISON OF TWO METHODS FOR THE ISOLATION OF BOVINE HERPES-VIRUS 1 (BHV-1) FROM EXTENDED BOVINE SEMEN
K.G. Loewen and C. le Q. Darcel.....935